

ABSTRACT OF THE DISCLOSURE

An improved method is described for providing Differentiated Services (Diffserv) traffic to a node in a network that implements a security method that discards duplicate packets received at the node. The method includes the step of identifying at least two service levels to be provided to received traffic and assigning separate sequential sequence numbers and different anti-replay bitmasks to each of the service levels. The anti-replay bitmask indicates the sequence numbers of packets that have been previously received at the node that should be compared against a received packet to determine whether a duplicate packet has been received. Such an arrangement reduces the possibility that traffic having lower priority is dropped as a security measure.